## DEC 2 2 2006

## Amendment to Claims

Please cancel claims 17-20 and 24 as indicated below.

Claims 1-16. (Cancelled).

Claims 17-20. (Cancelled).

21. (Previously Presented) A method for using a Bayesian network to diagnose an issue in a stock brokering domain, the method comprising:

displaying via a user interface one or more questions for guiding a user to identify at least one issue in the stock brokering domain to be solved by traversing questions connected within the Bayesian network responsive to answers to the questions;

responsive to identifying the at least one issue, identifying a cause connected via at least one directed edge in the Bayesian network with the identified issue;

traversing at least one directed edge from the identified cause to an action in the Bayesian network;

displaying via the user interface the action for the user to perform; and responsive to the user having performed the action, receiving user input indicating whether or not the action solved the issue.

22. (Previously Presented) The method of claim 21 further comprising:

responsive to the action not solving the identified issue, determining an optimal sequence of one or more actions from a set of actions connected in the Bayesian network to the identified cause which have not already been performed; and

computing an expected cost of executing the optimal sequence.

- 23. (Previously Presented) The method of claim 22 further comprising:
- computing an expected cost of first asking a question from a set of questions which have not already been answered and the cost of performing the optimal sequence of actions given an answer to the question.
- 24. (Cancelled).
- 25. (Previously Presented) A system for using a Bayesian network to diagnose an issue in a stock brokering domain, the system comprising:

action in the Bayesian network;

means for displaying via a user interface one or more questions for guiding a user to identify at least one issue in the stock brokering domain to be solved by traversing questions connected within the Bayesian network responsive to answers to the questions; responsive to identifying the at least one issue, means for identifying a cause connected via at least directed edge in the Bayesian network with the identified issue; means for traversing at least one directed edge from the identified cause to an

means for displaying via the user interface the action for the user to perform; and responsive to the user having performed the action, means for receiving user input indicating whether or not the action solved the issue.